MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2020/2021

BAC2644 – CORPORATE FINANCE

(All sections/Groups)

17 MARCH 2021
9.00 a.m – 12.00 p.m
(3 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of THREE (3) pages with FOUR (4) questions.
2. Attempt **ALL** questions. The distribution of the marks for each question is given.
3. Please write all your answer in the Answer Booklet.

QUESTION 1

(a) Consider the following simplified financial statements for the Wims Corporation (assuming no income taxes):

Income statement		Balance Sheet			
Sales	RM23,000	Assets	RM10,000	Debt	RM4,200
Costs	13,100			Equity	5,800
Net income	RM9,900	Total	RM10,000	Total	RM10,000

The company has predicted a sales increase of 11 percent. It has predicted that every item on the balance sheet will increase by 11 percent as well. Create the pro forma statements and reconcile them. What is the plug variable here? (15 marks)

(b) Mountain Frost is considering a new project with an initial cost of RM195,000. The equipment will be depreciated on a straight-line basis to a zero book value over the four-year life of the project. The projected net income for each year is RM19,800, RM20,700, RM24,600, and RM16,700, respectively. Calculate the average accounting return (AAR)? (5 marks)

(c) An investment project has annual cash inflows of RM2,800, RM3,700, RM5,100, and RM4,300, for the next four years, respectively. The discount rate is 11 percent. Calculate the discounted payback period for these cash flows if the initial cost is RM5,200? (5 marks)

(Total: 25 marks)

QUESTION 2

(a) Mazda has decided to manufacture a new model of car that will have a variable cost of RM23 and a selling price of RM57. The company determined that they should sell 79,000 units of the new model car each year for three years after they spent RM190,000 for a marketing study. The marketing study also determined that Mazda will lose sales of 25,000 units of its existing expensive cars that have a variable cost of RM46 and a selling price of RM118 per car. At the same time, the company will also increase sales of its inexpensive cars by 18,000 units. The inexpensive cars have a variable cost of RM18 and a selling price of RM30 per car. The fixed costs each year will be RM1,350,000. The initial fixed asset requirement is RM4,500,000 and will be depreciated on a straight-line basis over the life of the project (3 years). The tax rate is 15 percent and the required rate is 10 percent. Sales and cost projections have a ±3 percent range.

(i) Assuming the base-case scenario, what is the NPV for the new model of car? (8 marks)

(ii) Ignoring taxes, what will be the degree of operating leverage? (3 marks)

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(b) You are considering to invest in three stocks listed in the Bursa Malaysia. The information about three stocks is given as below:

State of Economy	Probability of state of economy	Rate of Return if State Occurs		
		Stock M	Stock N	Stock O
Boom	0.32	18%	23%	58%
Normal	0.41	14%	10%	6%
Bust	0.22	2%	-10%	-40%

If your portfolio is invested 20 percent in stock M and 40 percent each in stock N and stock O, compute the following.

(i) What is the portfolio expected return? (4 marks)

(ii) What is the standard deviation of the constructed portfolio? (3 marks)

(iii) If the expected T-bill rate is 2.50 percent, what is the expected risk premium on the portfolio? (3 marks)

(c) Stock X offers a market return of 22% with a systematic risk of 1.8 and stock Y offers a market return of 20.44% with a systematic risk of 1.6. If these stocks are correctly priced, what would the risk-free rate have to be? (4 marks)

(Total: 25 marks)

QUESTION 3

(a) Blitz Industries has a debt-equity ratio of 1.25. Its WACC is 8.3 percent, and its cost of debt is 5.1 percent. The corporate tax rate is 21 percent.

(i) Calculate the company's cost of equity capital? (5 marks)

(ii) Calculate the company's unlevered cost of equity capital? (5 marks)

(iii) What would the cost of equity be if the debt-equity ratio were 2? (5 marks)

(b) Change Corporation expects an EBIT of RM31,200 every year forever. The company currently has no debt, and its cost of equity is 11 percent. The tax rate is 22 percent. Calculate the current value of the company? (5 marks)

(c) Franklin, Inc., has an inventory turnover of 17.9 times, a payables turnover of 10.7 times, and a receivables turnover of 9.2 times. What is the company's cash cycle? Assume 365 days per year. (5 marks)

(Total: 25 marks)

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QUESTION 4

(a) Lite Sdn. Bhd. plans to expand their operation in foreign countries. Currently, the company considers to invest in a riskless project in Canada. The project requires an initial cost of CAD$2.95 million and is expected to have cash inflows of CAD$1.1 million a year for the life of the project. The duration of the project is three years and it will be worthless after three years. While the expected inflation rate in Canada is 3.5%, it is 3.1% in Malaysia. A risk-free security is paying 3.9 percent in Malaysia. The current spot rate is CAD$0.316.

The company also involves in off-balance sheet hedging activities. Last month, Lite Sdn. Bhd. purchased eight (8) March crude oil future contracts at a quoted price of 48.33. These contracts are based on 800 barrels per contract and quoted in RM per barrel. Assume, the actual price per barrel is RM54.22 in March.

As a strategic movement, Lite Sdn. Bhd. acquired Ether Sdn. Bhd. for a worth of RM68,000 of Lite Sdn. Bhd.'s stock. The incremental value of the acquisition is RM5,100. Lite Sdn. Bhd. has 10,200 shares of stock outstanding at a price of RM30 a share. Ether Sdn. Bhd. has 2,500 shares of stock outstanding at a price of RM19 a share.

(i) If the international Fisher effect applies, what is the net present value of this project in Canadian dollar? (7 marks)

(ii) After involved in hedging activities, how much did the company gain or lose? (7 marks)

(iii) What is the actual cost of the acquisition using company stock? (7 marks)

(iv) Differentiate between cash and stock acquisition. (4 marks)

(Total: 25 Marks)

End of Paper